

Daily Report

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Research

Today Prof. Tung replied the Visual SVM Demo 1 Report. The following two points will be considered in the next step:

- **Clustering of Support Vectors** It is necessary to just view the trend of support vectors when its number is high. There may be two ways of acquiring clusters from support vectors: 1. [1] introduces an EM based clustering approach. 2. parallel coordinates based approach to visually retrieve clusters.
- **Ranking of Support Vectors** When some support vectors are modified (removed), it may affect the classification boundary and result. It might be possible to rank the support according to the effect.

In the next week I will continue working on these two points.

Attic

The structure and interfaces of VisualObjectFactory module have been finished and codes are committed to SVN. Tomorrow I will deliver it to Xinxin to continue implementing specific standard visual objects and adding CompositeVisualObjectFactory. Also there will be a discussion with Fangzhou on SceneManager and the core structure of visual object and layout arrangement in the scene tree. After discussion design and implementation of SceneManager module will start.

References

- [1] A. K. H. Tung, X. Xu, and B. C. Ooi, "CURLER: finding and visualizing nonlinear correlation clusters," in *SIGMOD '05: Proceedings of the 2005 ACM SIGMOD international conference on Management of data*, ACM Request Permissions, June 2005.